

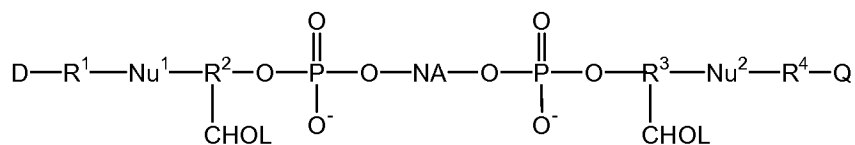
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-49. (Canceled)

50. (Previously presented) A probe nucleic acid having the formula:



wherein,

CHOL is a cholesterol derivative;

R^1 , R^2 , R^3 and R^4 are linker moieties independently selected from the group consisting of substituted or unsubstituted alkyl and substituted or unsubstituted heteroalkyl;

Nu^1 and Nu^2 are members independently selected from the group consisting of nucleotide residues and nucleoside residues;

NA is a nucleic acid sequence;

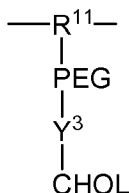
D is a donor of light energy; and

Q is a quencher of light energy,

wherein the CHOL moieties interact to bring D and Q into operative proximity, thereby enabling transfer of energy from D to Q, and

wherein said probe nucleic acid sequence is not hybridized to a target nucleic acid.

51. (Previously presented) The probe nucleic acid according to claim 50,
wherein R²-CHOL and R³-CHOL are independently selected and have structures according to
the formula:



wherein,

R¹¹ is a member selected from the group consisting of substituted or unsubstituted
alkyl and substituted or unsubstituted heteroalkyl;

PEG is polyethylene glycol;

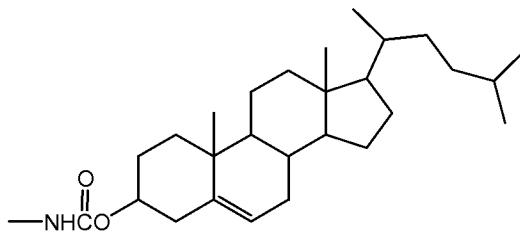
Y³ is an organic functional group adjoining said PEG to said CHOL.

52. (Previously presented) The probe nucleic acid according to claim 51,
wherein said PEG has from about 2 to about 20 ethylene glycol subunits.

53. (Previously presented) The probe nucleic acid according to claim 51 in
which R¹¹ is substituted or unsubstituted alkyl.

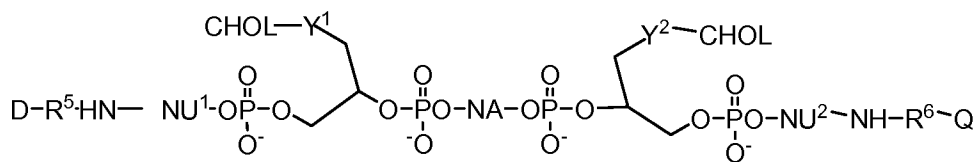
54. (Previously presented) The probe nucleic acid according to claim 53,
wherein R¹¹ is C₁-C₆ substituted or unsubstituted alkyl.

55. (Previously presented) The probe nucleic acid according to claim 51,
wherein Y³-CHOL has the structure:



56. (Previously presented) The probe nucleic acid according to claim 50, wherein Nu¹ and Nu² are nucleotides having an exocyclic amine group to which -R¹-D and -R⁴Q are attached, respectively.

57. (Currently amended) A probe nucleic acid having the formula:



wherein,

NA is a nucleic acid sequence;

Nu¹ and Nu² are members independently selected from the group consisting of nucleotide residues and nucleoside residues;

Y¹ and Y² are linking groups independently selected from the group consisting of substituted or unsubstituted alkyl and substituted or unsubstituted heteroalkyl;

R⁵ and R⁶ are linking groups independently selected from the group consisting of substituted or unsubstituted alkyl and substituted or unsubstituted heteroalkyl;

D is a donor of light energy; and

Q is a quencher of light energy,

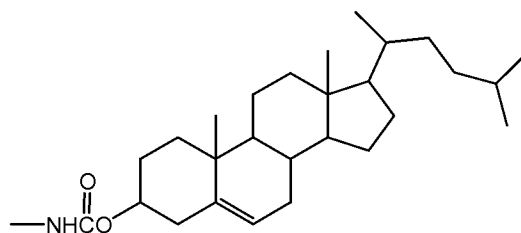
wherein each CHOL interacts with the other CHOL to bring D and Q into operative proximity, thereby enabling transfer of energy from D to Q, and wherein said probe nucleic acid sequence is not hybridized to a target nucleic acid.

58. (Previously presented) The probe nucleic acid according to claim 57, wherein Y¹ and Y² are members independently selected from substituted or unsubstituted heteroalkyl.

1 59. (Previously presented) The probe nucleic acid according to claim 58,
2 wherein Y¹ and Y² are polyethylene glycol.

 60. (Previously presented) The probe nucleic acid according to claim 59,
wherein said polyethylene glycol has from about 2 to about 20 ethylene glycol subunits.

1 61. (Previously presented) The probe nucleic acid according to claim 57,
2 wherein Y¹-CHOL and Y²-CHOL have the structure:



1 62. (Canceled)